

SEQUENCE LISTING

<110> PROCYON BIOPHARMA INC.
<120> PHARMACEUTICAL PREPARATIONS AND METHODS FOR INHIBITING TUMORS
<130> 06508-030-us-03
<150> 2,321,256
<151> 2000-10-16
<150> 2,355,334
<151> 2001-08-20
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Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu Ile Ser
35 40 45

Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp Asn Cys
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Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val Glu Lys
65 70 75 80

Lys Asp Pro Lys Lys Thr Cys Ser Val Ser Glu Trp Ile Ile
85 90

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Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn
20 25 30

Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys
35 40 45

Thr Cys Tyr Glu Thr Glu Ile Ser Cys Cys Thr Leu Val Ser Thr Pro
50 55 60

Val Gly Tyr Asp Lys Asp Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp
65 70 75 80

Cys Lys Tyr Ile Val Val Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser
85 90 95

Val Ser Glu Trp Ile Ile
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Tyr Thr Cys Ser Val Ser Glu Pro Gly Ile
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Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
1 5 10 15

<210> SEQ ID NO: 6
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Ile Val Val Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val Ser Glu
1 5 10 15

Trp Ile Ile

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ACTTGCTACG AAACAGAAAT TTCATGTTGC ACCCTTGTTC CTACACCTGT GGGTTATGAC 180
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

<210> SEQ ID NO: 11
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

Ile

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly
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1 5 10 15

Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn

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<211> 34

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn Cys

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn Cys Gln
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn Cys Gln Arg
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn Cys Gln Arg Ile Phe
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Asn Cys Gln Arg Ile Phe Lys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Asn Cys Gln Arg Ile Phe Lys Lys
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu
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1 5 10 15
Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr
35 40 45

<210> SEQ ID NO: 40
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val
35 40 45

<210> SEQ ID NO: 42
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

<210> SEQ ID NO: 43
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu Lys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys Asp
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys Asp Pro
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15
Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45
Glu Lys Lys Asp Pro Lys
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys Asp Pro Lys Lys
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1 5 10 15
Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys Asp Pro Lys Lys Thr
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45
Glu Lys Lys Asp Pro Lys Lys Thr Cys
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30
Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
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Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val Ser
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
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Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val Ser Glu
50 55 60

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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val Ser Glu Trp
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val Ser Glu Trp Ile
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Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
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Ile Ser Cys Cys Thr Leu Val Ser Thr Pro Val Gly Tyr Asp Lys Asp
20 25 30

Asn Cys Gln Arg Ile Phe Lys Lys Glu Asp Cys Lys Tyr Ile Val Val
35 40 45

Glu Lys Lys Asp Pro Lys Lys Thr Cys Ser Val Ser Glu Trp Ile Ile
50 55 60

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<210> SEQ ID NO: 60
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Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu
1 5 10 15

Thr

<210> SEQ ID NO: 61
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Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr
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Glu Thr

<210> SEQ ID NO: 62
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Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys
1 5 10 15

Tyr Glu Thr

<210> SEQ ID NO: 63
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His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr
1 5 10 15

Cys Tyr Glu Thr
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<210> SEQ ID NO: 64
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Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys
1 5 10 15

Thr Cys Tyr Glu Thr
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<210> SEQ ID NO: 65
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Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr
1 5 10 15

Cys Thr Cys Tyr Glu Thr
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<210> SEQ ID NO: 66
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Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu
1 5 10 15

Thr Cys Thr Cys Tyr Glu Thr
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<210> SEQ ID NO: 67
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Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys
1 5 10 15

Glu Thr Cys Thr Cys Tyr Glu Thr
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<210> SEQ ID NO: 68
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Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn
1 5 10 15
Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25

<210> SEQ ID NO: 69
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Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp
1 5 10 15
Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25

<210> SEQ ID NO: 70
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Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr
1 5 10 15
Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25

<210> SEQ ID NO: 71
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Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln
1 5 10 15
Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25

<210> SEQ ID NO: 72
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Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp
1 5 10 15

Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25

<210> SEQ ID NO: 73
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Arg Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu
1 5 10 15

Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25 30

<210> SEQ ID NO: 74
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Thr Arg Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser
1 5 10 15

Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25 30

<210> SEQ ID NO: 75
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Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn
1 5 10 15

Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25 30

<210> SEQ ID NO: 76
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Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile
1 5 10 15

Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu
20 25 30

Thr

<210> SEQ ID NO: 77
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Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro
1 5 10 15
Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr
20 25 30
Glu Thr

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Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn Lys His
1 5 10 15
Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys
20 25 30
Tyr Glu Thr
35

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Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn Lys
1 5 10 15
His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr
20 25 30
Cys Tyr Glu Thr
35

<210> SEQ ID NO: 80
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Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly Asn
1 5 10 15
Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys
20 25 30
Thr Cys Tyr Glu Thr
35

<210> SEQ ID NO: 81
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Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys Gly
1 5 10 15

Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu Thr
20 25 30

Cys Thr Cys Tyr Glu Thr

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Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu Lys
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Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys Glu
20 25 30

Thr Cys Thr Cys Tyr Glu Thr

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<210> SEQ ID NO: 83

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Pro Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp Leu
1 5 10 15

Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn Cys
20 25 30

Glu Thr Cys Thr Cys Tyr Glu Thr

35

40

<210> SEQ ID NO: 84

<211> 41

<212> PRT

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Ile Pro Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met Asp
1 5 10 15

Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp Asn
20 25 30

Cys Glu Thr Cys Thr Cys Tyr Glu Thr

35

40

<210> SEQ ID NO: 85
<211> 42
<212> PRT
<213>
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Phe Ile Pro Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys Met
1 5 10 15
Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr Asp
20 25 30
Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
35 40

<210> SEQ ID NO: 86
<211> 43
<212> PRT
<213>
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Tyr Phe Ile Pro Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys Cys
1 5 10 15
Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln Thr
20 25 30
Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
35 40

<210> SEQ ID NO: 87
<211> 44
<212> PRT
<213>
<400>

Cys Tyr Phe Ile Pro Asn Glu Gly Val Pro Gly Asp Ser Thr Arg Lys
1 5 10 15
Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp Gln
20 25 30
Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
35 40

<210> SEQ ID NO: 88
<211> 45
<212> PRT
<213>
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Ser Cys Tyr Phe Ile Pro Asn Glu Gly Val Pro Gly Asp Ser Thr Arg
1 5 10 15
Lys Cys Met Asp Leu Lys Gly Asn Lys His Pro Ile Asn Ser Glu Trp
20 25 30

Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr

35

40

45

<210> SEQ ID NO: 89
<211> 15
<212> PRT
<213>
<220>
<221> Modified site
<222> 1
<223> The residue in this position is either glutamic acid, asparagine, or aspartic acid.

<220>
<221> Modified site
<222> 4
<223> The residue in this position is either threonine, or serine.

<220>
<221> Modified site
<222> 6
<223> The residue in this position is either glutamic acid, asparagine, or aspartic acid.

<220>
<221> Modified site
<222> 8
<223> The residue in this position is either glutamic acid, asparagine, or aspartic acid.

<220>
<221> Modified site
<222> 9
<223> The residue in this position is either threonine, or serine.

<220>
<221> Modified site
<222> 11
<223> The residue in this position is either threonine, or serine.

<220>
<221> Modified site
<222> 13
<223> The residue in this position is either tyrosine, or phenylalanine.

<220>
<221> Modified site
<222> 14
<223> The residue in this position is either glutamic acid, asparagine, or aspartic acid.

<220>
<221> Modified site
<222> 15
<223> The residue in this position is either threonine, or serine.

<400>
Xaa Trp Gln Xaa Asp Xaa Cys Xaa Xaa Cys Xaa Cys Xaa Xaa Xaa
1 5 10 15

<210> SEQ ID NO: 90

<211> 30

<212> PRT

<213>

<400>

Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
20 25 30

<210> SEQ ID NO: 91

<211> 45

<212> PRT

<213>

<400>

Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu Trp
20 25 30

Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr
35 40 45

<210> SEQ ID NO: 92

<211> 60

<212> PRT

<213>

<400>

Glu Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu
1 5 10 15

Trp Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu Trp
20 25 30

Gln Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr Glu Trp Gln
35 40 45

Thr Asp Asn Cys Glu Thr Cys Thr Cys Tyr Glu Thr

50 55 60